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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,891	04/29/2002	Bertil Olsson	10400-000003/US	8806

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EXAMINER

DANG, THANH HA T

ART UNIT PAPER NUMBER

2163

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/019,891	Applicant(s) OLSSON, BERTIL	
	Examiner Thanh-Ha Dang	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/28/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are rejected in this Office Action.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-20 are not tangibly embodied in some form of computer medium. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. See MPEP 2106, section IV.B1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,505,205 issued to Kothuri et al. ("Kothuri").

As to claim 1, Kothuri teaches "a method for handling a database containing objects that have an extension in a coordinate system representing a multidimensional reality, the coordinate system being divisible into a plurality of defined, multidimensional intervals, each time an object is entered into the database, the method comprising:

- determining which multidimensional intervals the object has an extension in" (Figure 5, wherein blocks 502 and 504 determine which

multidimensional intervals the object has an extension in, column 15, lines 18-21);

- “comparing the determined number of objects with a predetermined threshold value” (Figure 5, wherein node capacity described in block506 is equivalent to a threshold value, column 15, lines 22-27); and
- “dividing, if the threshold value is exceeded, the interval into at least two smaller intervals, in order to limit the number of objects related to an extension in any given, defined interval” (Figure 5 (block514), column 3, lines 32-53 and column 15, lines 28-61).

As to claim 2, Kothuri teaches “the step of linking each interval to a set of objects having an extension in the interval” (Figures 3-4, column 10, lines 66-67, column 11, lines 1-67 and column 12, lines 1-6).

As to claim 3, Kothuri teaches “the step of linking each object to a set of intervals within which the object has an extension” (Figure 1, column 8, lines 5-26; Figures 3-4, column 10, lines 66-67, column 11, lines 1-67 and column 12, lines 1-6).

As to claim 4, Kothuri teaches “the coordinate system comprises at least one time dimension” (Figure 3, column 10, lines 59-65).

As to claim 5, Kothuri teaches “the coordinate system comprises at least spatial dimension” (Figure 1, column 8, lines 5-26 and column 5, lines 36-49).

As to claim 6, Kothuri teaches “each division of an interval occurs in only one dimension” (Figure 3, column 10, lines 62-67 and column 11, lines 1-65).

As to claim 7, Kothuri teaches “when the threshold value is exceeded, the interval is divided into two smaller intervals” (column 3, lines 37-42).

As to claim 8, Kothuri teaches “when the threshold value is exceeded, the interval is divided into two intervals of equal size” (column 3, lines 47-50).

As to claim 9, Kothuri teaches “the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed” (column 18, lines 20-26).

As to claim 10, Kothuri teaches “the step of linking each object to a set of intervals within which the object has an extension” (Figure 1, column 8, lines 5-26; Figures 3-4, column 10, lines 66-67, column 11, lines 1-67 and column 12, lines 1-6).

As to claim 11, Kothuri teaches “the coordinate system comprises at least one time dimension” (Figure 3, column 10, lines 59-65).

As to claim 12, Kothuri teaches “the coordinate system comprises at least one time dimension” (Figure 3, column 10, lines 59-65).

As to claim 13, Kothuri teaches “the coordinate system comprises at least one time dimension” (Figure 3, column 10, lines 59-65).

As to claim 14, Kothuri teaches “the coordinate system comprises at least spatial dimension” (Figure 1, column 8, lines 5-26 and column 5, lines 36-49).

As to claim 15, Kothuri teaches “the coordinate system comprises at least spatial dimension” (Figure 1, column 8, lines 5-26 and column 5, lines 36-49).

As to claim 16, Kothuri teaches “the coordinate system comprises at least spatial dimension” (Figure 1, column 8, lines 5-26 and column 5, lines 36-49).

As to claim 17, Kothuri teaches “the coordinate system comprises three spatial dimensions” (column 5, lines 36-49).

As to claim 18, Kothuri teaches “the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed” (column 18, lines 20-26).

As to claim 19, Kothuri teaches “the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed” (column 18, lines 20-26).

As to claim 20, Kothuri teaches “the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed” (column 18, lines 20-26).


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Ha Dang whose telephone number is 571-272-4033. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanh-Ha Dang
Examiner
Art Unit 2163


ALFORD KINDRED
PRIMARY EXAMINER